

REMARKS

Claims 1-49 are pending in the present application. Claims 6-9, 11, 12, 18-21, 23-49 have been withdrawn from consideration. In the Office Action mailed on May 8, 2006, the Examiner took the following action: (1) objected to the drawings; (2) rejected claims 3, 10 and 15 under 35 U.S.C. §112, second paragraph as being indefinite; (3) rejected claims 1-3, 10, 13-15, and 22 under 35 U.S.C. §102(b) as being anticipated by Williams (U.S. 2,052,914); (4) rejected claims 1, 4, 10, 13, 16 and 22 under 35 U.S.C. 102(b) as being anticipated by Underwood (U.S. 3,877,671); (5) rejected claims 1, 4, 10, 13, 16 and 22 under 35 U.S.C. 102(b) as being anticipated by Emsters (U.S. 6,302,358); and (6) rejected claims 2, 3, 5, 14, 15, and 17 under 35 U.S.C. 103(a) as unpatentable by Underwood in view of Williams. Claims 1, 3-5, 13-17, and 22 have been amended. Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the following remarks.

I. Objections to the Drawings

The Examiner objected to the drawings due to informalities, namely, a missing reference number. Applicants submit concurrently herewith revised formal drawings wherein the informality noted by the Examiner has been corrected. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objections to the drawings.

II. Rejections under 35 U.S.C. §112

Claims 3, 10, and 15 are rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctively claim the subject matter which the applicants regard as the invention. Applicants have amended claim 3 and 15 to recite the limitation of “the payload assembly” instead of “the attachment assembly.” Further, applicants

also have amended claim 10 to render it consistent with claim 1. Accordingly, applicants respectfully request reconsideration and withdrawal of the rejections of claims 3, 10, and 15.

III. Rejections under 35 U.S.C. §102(a)

Claims 1-3, 10, 13-15, and 22 are rejected under 35 U.S.C. §102(b) as being anticipated by Williams; claims 1, 4, 10, 13, 16 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Underwood; and claims 1, 4, 10, 13, 16 and 22 are rejected under 35 U.S.C. §102(b) as being anticipated by Emsters. Respectfully, applicants traverse the rejections, and submit the claims are allowable over the cited references for the reasons explained in detail below.

Williams (U.S. 2,052,914)

Williams teaches anchoring means for hold-down devices or members. (1:4-9). The anchoring means comprises a hollow or channel guide rail fixed to the floor and an anchor member moveable within. (1:10-15). The anchor member is adjustable longitudinally along the guide rail and is also lockable and releasable by vertical movements. (1:10-19).

Underwood (U.S. 3,877,671)

Underwood teaches a tie-down panel apparatus comprising one or more unitary, preferably extruded panel elements each having a structurally uniting tie-down channel integral to and running lengthwise of the panel element. (1:55-59). The panel elements have side sections parallel with the tie-down channel and mateable with other panel elements to provide a vertical self-aligning mechanical interlock. (1:60-64).

Emsters (U.S. 6,302,358)

Emsters teaches a system to convert part of the main deck of an aircraft from a passenger transport configuration to a freight transportation configuration, and vice versa. (1:5-10). The system includes anchor means to lock at least one seat pallet flush and rigidly secured to the aircraft deck, and an anchor means to secure at least one cargo loading assembly to the deck. (4:35-40).

Claims 1-5, and 10

Claim 1, as amended, recites a payload track adapted for use with a payload assembly, comprising: an elongated support including a first channel member having a first support surface, a second channel member approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support surface, the support surfaces being adapted to engage directly or indirectly with a lower surface of a floor panel, an engagement member centrally disposed between the two channel members, wherein a first vertical side of the engagement member is attached to a first adjacent portion of the first channel member and a second vertical side of the engagement member is attached to a second adjacent portion of the second channel member, and the engagement member includes an engagement surface configured to be coupled to the payload assembly, wherein the engagement member is recessed below the lower surface of the floor panel when the support surfaces are engaged with the lower surface and the engagement surface is at least one of flush with and recessed below the lower surface of the floor panel when the support surfaces are engaged with the lower surface. Applicants respectfully assert that the payload track, as recited in amended claim 1, is patentable over the cited references (Williams, Underwood, and Emsters) for at least the following reasons.

With respect to Williams, applicants respectfully submit that Williams does not teach a payload track adapted for use with a payload assembly, comprising: an elongated support

including *a first channel member* having a first support surface, a *second channel member* approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support surface, *the support surfaces being configured to engage directly or indirectly with a lower surface of a floor panel.* (emphasis added). In contrast, Williams merely teaches the *single* channel member 8, as opposed to a first channel member and a second channel. Further, the *single* channel member 8 of Williams is not capable of being adapted to engage directly or indirectly with a lower surface of a floor panel because it lies in the same plane as floor 2.

Second, Williams does not teach a payload track adapted for use with a payload assembly, comprising: *an engagement member centrally disposed between the two channel members, wherein a first vertical side of the engagement member is attached to a first adjacent portion of the first channel member and a second vertical side of the engagement member is attached to a second adjacent portion of the second channel member, and the engagement member includes an engagement surface configured to be coupled to the payload assembly, wherein the engagement member and the engagement surface are at least one of flush with and recessed below the lower surface of the floor panel when the support surfaces are engaged with the lower surface.* (emphasis added). In contrast, the base piece 18 of Williams is not attached to the sides of the *single* channel member 8, but is instead freely moveable within the *single* channel member 8. (Williams, Figure 4). Furthermore, the base piece 18 of Williams is not recessed below the lower surface of the floor 2. Rather, it is also located in the same plane as floor 2. (Williams, Figure 4). Finally, the base piece 18 of Williams lacks an engagement surface that is adapted to be coupled to a payload assembly. This is because base piece 18 is coupled to a tie-down chain 11 that must be positioned around a payload assembly. (Williams, Figure 3).

Similarly, Emsters does not teach a payload track adapted for use with a payload assembly, comprising: an engagement member centrally disposed between the two channel members, wherein a first vertical side of the engagement member is attached to a first adjacent

portion of the first channel member and a second vertical side of the engagement member is attached to a second adjacent portion of the second channel member, and the engagement member includes an engagement surface configured to be coupled to the payload assembly, *wherein the engagement member and the engagement surface are at least one of flush with and recessed below the lower surface of the floor panel when the support surfaces are engaged with the lower surface.* (emphasis added). Instead, Emsters merely teaches a deck support 24 with a female fitting piece 25, wherein the deck support 24 is not recessed below the lower surface of main deck floor 5. (Emsters, Figure 10).

With respect to Underwood, applicants respectfully submit that Underwood does not teach a payload track adapted for use with a payload assembly, comprising: *an elongated support including a first channel member having a first support surface, a second channel member approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support surface,* the support surfaces being adapted to engage directly or indirectly with a lower surface of a floor panel. (emphasis added).

In contrast, Underwood teaches that each panel element 12 of its tie-down apparatus is comprised of “*a unitary structure including an upper plate 24, a lower plate 26, sides 28 and 30, and a central tie-down section 32, all formed of a single piece* of light weight, strong material, such as aluminum, steel and plastic or reinforced plastic. (Underwood, 2:40-43). Underwood further specifies that the element is preferably *extruded*, although its component parts may be welded or otherwise bonded together. (Underwood, 2:43-46). *Therefore, maximum strength and rigidity is provided by an integral unitary construction between bottom wall 40 and lower plate 26 and between side walls 42 and upper plate 24.*” (Underwood, 2:40-65).

Further, Underwood also does not teach a tie-down apparatus that has a separate engagement member. Instead, Underwood teaches an *integral* elongated slot 35. The relevant portion of the specification to Underwood states, “*An elongated slot 34 is formed lengthwise in*

upper plate 24 to provide an opening 36 for reception of tie-down mechanism 20. (Underwood, 2:46-49). The slots open into central section 32 which is configured as a U-shaped channel 38 having a bottom wall 40 and side walls 42 which extend into and become a part of upper plate 24. (2:49-52). Thus, upper plate 24 at section 32 becomes top walls or lips 43 for the U-shaped channel. (Underwood, 2:52-53). Side walls 42 are angled from the bottom wall and extend to and, as stated above, are integral with upper plate 24. (Underwood, 2:56-59). Top walls 43 are angled with respect to the side walls and extend toward each other to form opening 36. (Underwood, 2:59-61)." (emphasis added).

Thus, Underwood does not teach or fairly suggest a payload track adapted for use with a payload assembly that comprises an elongated support including a separate first channel member, a separate second channel member, as well as a separate engagement member, as recited in claim 1.

Furthermore, Underwood also fails to teach or fairly suggest a payload track adapted for use with a payload assembly comprising an engagement member centrally disposed between the two channel members, *wherein a first vertical side of the engagement member is attached to a first adjacent portion of the first channel member and a second vertical side of the engagement member is attached to a second adjacent portion of the second channel member*, the engagement member includes an engagement surface configured to be coupled to the payload assembly, wherein the engagement member and the engagement surface are at least one of flush with and recessed below the lower surface of the floor panel when the support surfaces are engaged with the lower surface. (emphasis added). Instead, Underwood teaches a central section 32 that is attached at the bottom to the integral segment 44 of each portion of panel element 12, and at the top, to the top walls 43, rather than an engagement member that attaches at the vertical sides to channel members. (Underwood, Figure 2).

Accordingly, applicants respectfully submit each of the cited references (Williams, Underwood, and Emsters), does not teach or fairly suggest the payload track recited in claim 1.

Thus, claim 1 is allowable over the cited references. Furthermore, since claims 2-5, and 10 depend from claim 1, they are also allowable over the cited references for at least the same reason claim 1 is allowable, as well as due to additional limitations recited in those claims.

Claims 13-17, and 22

Claim 13, as amended, recites a payload assembly, comprising: a payload member having at least one rigid support member; and a floor assembly including at least one floor panel, *an elongated support having a first channel member having a first support surface, a second channel member approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support surface*, the support surfaces being engaged with a lower surface of the floor panel, an engagement member centrally disposed between the two channel members, *wherein a first vertical side of the engagement member is attached to a first adjacent portion of the first channel member and a second vertical side of the engagement member is attached to a second adjacent portion of the second channel member*, and the engagement member includes an engagement surface coupled to the rigid support member, wherein the engagement member is recessed below the lower surface of the floor panel when the support surfaces are engaged with the lower surface and the engagement surface is at least one of flush with and recessed below the lower surface of the floor panel. (emphasis added).

For the reasons set forth above with respect to claim 1, Applicants respectfully assert that claim 13, as amended, is not anticipated by the cited references (Williams, Underwood, and Emsters). The cited references fail to teach or fairly suggest a payload assembly that includes a payload member having at least one rigid support member; and a floor assembly including at least one floor panel, *an elongated support having a first channel member having a first support surface, a second channel member approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support*

surface, the support surfaces being engaged with a lower surface of the floor panel, an engagement member centrally disposed between the two channel members, wherein a first vertical side of the engagement member is attached to a first adjacent portion of the first channel member and a second vertical side of the engagement member is attached to a second adjacent portion of the second channel member. As described more fully above, Williams merely teaches a single channel member 8, as opposed to a first channel member and a second channel. Also, the base piece 18 of Williams is not attached to the sides of its single channel member 8, but is instead freely moveable within the single channel member 8. (Williams, Figure 4).

Similarly, Emsters and Underwood fail to teach or suggest the assembly recited in claim

13. Emsters merely teaches a deck support 24 with a female fitting piece 25, wherein the deck support 24 is not recessed below the lower surface of main deck floor 5. (Emsters, Figure 10), while Underwood teaches that each panel element 12 of its tie-down apparatus is comprised of “*a unitary* structure including an upper plate 24, a lower plate 26, sides 28 and 30, and a central tie-down section 32, all formed of a *single piece* of light weight, strong material, such as aluminum, steel and plastic or reinforced plastic. (Underwood, 2:40-43).

Accordingly, applicants respectfully submit each of the cited references (Williams, Underwood, and Emsters), does not teach or fairly suggest the payload assembly recited in claim 13. Thus, claim 13 is allowable over the cited references. Furthermore, since claims 14-17 and 22 depend from claim 13, they are also allowable over the cited references for at least the same reason claim 13 is allowable, as well as due to additional limitations recited in those claims.

IV. Rejections under 35 U.S.C. §103(a)

Claims 2, 3, 5, 14, 15, 17 are rejected under 35 U.S.C. §103(a) as unpatentable over Underwood in view of Williams. Respectfully, applicants traverse the rejections, and submit the claims are allowable over the references cited for the reasons explained in detail below.

Claims 2-3, and 5

Claims 2-3 and 5 depend from claim 1. As amended, claim 1 recites a payload track adapted for use with a payload assembly, comprising: an elongated support including a first channel member having a first support surface, a second channel member approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support surface, the support surfaces being configured to engage directly or indirectly with a lower surface of a floor panel, an engagement member centrally disposed between the two channel members, wherein a first vertical side of the engagement member is attached to a first adjacent portion of the first channel member and a second vertical side of the engagement member is attached to a second adjacent portion of the second channel member, and the engagement member includes an engagement surface configured to be coupled to the payload assembly, wherein the engagement member is recessed below the lower surface of the floor panel when the support surfaces are engaged with the lower surface and the engagement surface is at least one of flush with and recessed below the lower surface of the floor panel when the support surfaces are engaged with the lower surface.

Applicants respectfully submit that, as discussed above, the cited references (Williams and Underwood), whether individually or in combination, do not disclose, teach, or fairly suggest every aspect of claim 1. In other words, Williams does not remedy the deficiency in the teachings of Underwood.

As described more fully above, Underwood does not disclose, teach or fairly suggest a payload track comprising, *“an elongated support including a first channel member having a first support surface, a second channel member approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support surface,”* and *“an engagement member centrally disposed between the two channel members, wherein a first vertical side of the engagement member is attached to a first adjacent portion of the first channel member and a second vertical side of the engagement member is*

attached to a second adjacent portion of the second channel member.” Likewise, as further stated above, Williams merely teaches an anchor means with a single channel member 8 and a moveable base piece 18 that is not attached to the channel member 8.

Thus, claim 1 is allowable over the cited references. Furthermore, since claims 2-3, and 5 depends from claim 1, they are also allowable over the cited references for at least the same reason that claim 1 is allowable, as well as for the additional limitation recited.

Claims 14-15 and 17

Claims 14-15 and 17 depend from claim 13. As amended, claim 13 recites a payload assembly, comprising: a payload member having at least one rigid support member; and a floor assembly including at least one floor panel, an elongated support having a first channel member having a first support surface, a second channel member approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support surface, the support surfaces being engaged with a lower surface of the floor panel, an engagement member centrally disposed between the two channel members, wherein a first vertical side of the engagement member is attached to a first adjacent portion of the first channel member and a second vertical side of the engagement member is attached to a second adjacent portion of the second channel member, and the engagement member includes an engagement surface coupled to the rigid support member, wherein the engagement member and the engagement surface are at least one of flush with and recessed below the lower surface of the floor panel.

Applicants respectfully submit that, as discussed more fully above, the cited references (Underwood and Williams), whether individually or in combination, does not disclose, teach, or fairly suggest every aspect of claim 13. In other words, Williams does not remedy the deficiency in the teachings of Underwood.

As stated above, neither Williams or Underwood discloses, teaches, or suggests a payload assembly comprising “*an elongated support including a first channel member having a first support surface, a second channel member approximately parallel to and spaced apart from the first channel member having a second support surface approximately co-planar with the first support surface,*” and “*an engagement member centrally disposed between the two channel members, wherein a first vertical side of the engagement member is attached to a first vertical side of the first channel member and a second vertical side of the engagement member is attached to a second vertical side of the second channel member.*”

Similarly, the cited references do not teach or suggest a payload assembly comprising, “*an engagement member that includes an engagement surface coupled to a rigid support member.*” Underwood teaches a U-shaped channel 38 with top walls 43 (which are part of top section 24) that are *covered* by material 78 *adhered* to its upwardly surface. (Underwood, 3:54-56). Thus, the top walls 43 of the U-shaped channel 38 are not capable of being coupled to a rigid support member of a payload member. Furthermore, even absent material 78, attachment 18 and flexible strap 16 of flexible tie-down mechanism 20 also obstruct top walls 43 so they cannot be coupled to a rigid support member of a payload member. (Underwood, Figure 2). This deficiency of Underwood is not remedied by Williams as Williams merely teaches to a flexible tie-down chain 11, coupled to the base piece 18, which also obstructs base piece 18 and prevents its upwardly surface from being coupled to a rigid support member of a payload member. (Williams, Figure 3).

Thus, claim 13 is allowable over the cited references. Furthermore, since claims 14-15 and 17 depend from claim 13, they are also allowable over the cited references for at least the same reasons that claim 13 is allowable, as well as due to additional limitations recited.

CONCLUSION

Applicants respectfully submit pending claims 1-5, 10, 13-17, and 22 are now in condition for allowance. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully Submitted,

Dated: Aug. 8, 2006

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Enclosures:

Replacement Drawings

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